

LISTING OF THE CLAIMS

Q1 Claim 1 (Currently Amended) A printer system which inputs drawing data created or edited by an application on a host computer, converts the drawing data to a printer language to create print data, and also outputs the image drawn based on the print data from a printer, said printer system comprising:

A printer driver which adds information for a drawing object to the print data to identify the type of drawing object ~~to the print data~~ and, when the drawing object is graphics data, also adds area fill information; and

a printer control unit which selects dither data ~~appropriate for the drawing object~~ based on the information for a drawing object and, when the drawing object is graphics data, the area fill information added to the print data, and executes a dither method based on the selected dither data ~~on the print data to expand the data to an~~ form the image drawn.

Claim 2 (Original) The printer system according to Claim 1, wherein said printer control unit comprises:

an object determination unit which determines a drawing object of the print data based on the information for a drawing object;

a dither data output unit which selects dither data matching the drawing object determined by said object determination unit to output the data; and

a drawing processing unit which executes a dither method on the print data using the dither data output from said dither data output unit to expand the data to an image.

Claim 3 (Currently Amended): The printer system according to Claim 1, wherein the drawing object includes at least one of a character data, and a photograph data, in addition to and a graphics data.

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Claim 4 (Currently Amended): The printer system according to Claim 1, wherein, when ~~graphics data used for drawing a graphics is converted to print data,~~ ~~said printer driver further adds information for area fill, that indicates presence or absence of area fill in a graphics image to be drawn based on the graphics data, to the print data, and~~ the area fill information added to the print data indicates the drawing object is graphics data with no area fill, said printer control unit selects either data ~~based on the area fill information together with the drawing object information~~ appropriate for the graphics data with no area fill.

Claim 5 (Original) The printer according to Claim 1, wherein, when the drawing data is CAD data created by a CAD (Computer Aided Design) application, said printer driver adds information indicating that the data is the CAD data to print data, and said printer control unit performs processing on the print data using CAD either data dedicated to the CAD data.

Claim 6 (Currently Amended) An image processing method for converting drawing data created or edited by an application on a host computer to a printer language to create print data, and also outputting an image drawn based on the print data from a printer, said image processing method comprising:

a drawing object adding step of adding information for a drawing object to the print data to identify the type of drawing object ~~to the print data~~ and, when the drawing object is graphics data, also adding area fill information; and

a drawing processing step of selecting dither data ~~appropriate for the drawing object~~ based on the drawing-object information added to the print data and, when the drawing object is graphics data, the area fill information added to the print data, and executing a dither method based on the selected dither data ~~on the print data to expand the data to an~~ form the image drawn.

Claim 7 (Original) The image processing method according to Claim 6, wherein the drawing processing step comprises:

an object determining step of determining a drawing object of the print data based on the drawing-object information;

a dither data outputting step of selecting dither data matching the drawing object determined in the object determining step to output the data; and

a dithering step of executing a dither method on the print data using the dither data output in the dither data outputting step to expand the data to an image.

Claim 8 (Currently Amended) The image processing method according to Claim 6, wherein the drawing object includes at least one of a character data, and a photograph data, in addition to ~~and a~~ graphics data.

Claim 9 (Currently Amended): The image processing method according to Claim 6, wherein, when ~~graphics data used for drawing a graphics is converted to~~

~~print data~~, the drawing object adding step ~~further~~ includes ~~an area fill information~~
~~adding step of adding information for area fill, that indicates present or absence of~~
~~area fill in a graphics image to be drawn based on the graphics data, to the print data,~~
~~and~~ the area fill information added to the print data indicates the drawing object is
graphics data with no area fill, the drawing processing step ~~comprises a step of~~
~~includes~~ selecting dither data ~~based on the area fill information together with the~~
~~drawing object information appropriate for the graphics data with no area.~~

Q1 Claim 10 (Original) The image processing method according to Claim 6, the
method further comprising a CAD information adding step of adding information
indicating CAD data to print to print data when the drawing data is CAD data created
by a CAD (Computer Aided Design) application, wherein the print data is processed
using CAD dither data dedicated to the CAD data in the drawing processing step.

Claim 11 (Currently Amended) A computer-readable recording medium in
which a program for making a computer execute an image processing method for
converting drawing data created or edited by an application on a host computer to a
printer language to create print data, and also outputting an image drawn based on the
print data from a printer, is recorded, said image processing method comprising:

a drawing object adding step of adding information for a drawing object to the
print data to identify the type of drawing object ~~to the print data~~ and, when the
drawing object is graphics data, also adding area fill information; and

a drawing processing step of selecting dither data ~~appropriate for the drawing~~
~~object~~ based on the drawing-object information added to the print data and, when the
drawing object is graphics data, the area fill information added to the print data, and

executing a dither method based on the selected dither data ~~on the print data to expand the data to an~~ form the image is recorded.

Claim 12 (Currently Amended) A The computer-readable recording medium according to Claim 11, wherein the drawing processing step comprises:

an object determining step of determining a drawing object of the print data based on the drawing-object information;

a dither data outputting step of selecting dither data matching the drawing object determined in the object determining step to output the data; and


a dithering step of executing a dither method on the print data using the dither data output in the dither data outputting step to expand the data to an image.

Claim 13 (Currently Amended) A The computer-readable recording medium according to Claim 11, wherein the drawing object includes at least one of a character data, and a photograph data, in addition to ~~and~~ a graphics data.

Claim 14 (Currently Amended): A The computer-readable recording medium according to Claim 11, where, when ~~graphics data used for drawing a graphics is converted to print data,~~ the drawing object adding step ~~further~~ includes ~~an area fill information adding step of adding information for are fill, that indicates presence or absence of area fill in a graphics image to be drawn based on the graphics data, to the print data,~~ and the area fill information added to the print data indicates the drawing object is graphics data with no area fill, the drawing processing step ~~comprising a step of~~ includes selecting dither data ~~based on the area fill information together with the drawings object information~~ appropriate for the graphics data with no area.

Claim 15 (Currently Amended): A The computer-readable recording medium according to Claim 11, the method further comprising a CAD information adding step of adding information indicating CAD data to print data when the drawing data is CAD data created by a CAD (Computer Aided Design) application, wherein the print data is processed using CAD dither data dedicated to the CAD data in the drawing processing step.

Claim 16. (New) A printer which inputs drawing data, converts the drawing data to a printer language to create print data, and also outputs the image drawn based on the print data, said printer comprising

 a printer driver which adds information for a drawing object of the print data to identify the type of drawing object as photograph data to the print data when the drawing object is graphic data with area fill.

Claim 17 (New) The printer according to Claim 16, wherein the drawing object includes at least one of character data and photograph data, in addition to graphics data.

Claim 18 (New) The printer according to Claim 16, wherein the printer driver adds information for a drawing object of the print data to identify the type of drawing object as character data to the print data when the drawing object is graphics data with no area fill.

Claim 19 (New) A printer which inputs drawing data, converts the drawing data to a printer language to create print data, and also outputs the image drawn based on the print data, said printer comprising:

a printer control unit which selects dither data for photograph appropriate for graphics data with area fill based on information for a drawing object of the print data, and executes a dither method based on the dither data on the print data to expand the data to an image.

Claim 20 (New) The printer according to Claim 19, wherein said printer control unit comprises:

an object determination unit which determines a drawing object of the print data based on the information for a drawing object;

a dither data output unit which selects dither data matching the drawing object determined by said object determination unit to output the data; and

a drawing processing unit which executes a dither method on the print data using the dither data output from said dither data output unit to expand the data to an image.

Claim 21 (New) The printer according to Claim 19, wherein the drawing object includes at least one of character data and photograph data, in addition to graphics data.

Claim 22 (New) The printer according to Claim 16, wherein said printer control unit selects dither data for character appropriate for graphics data with no area fill based on information for a drawing object of the print data.